

CLAIMS

1. A method of making a device comprising the steps of:
providing a substrate;
5 forming a first conductive layer over the substrate;
forming a sacrificial layer over the first conductive layer;
forming a dielectric layer over the sacrificial layer, wherein the
dielectric layer comprises silicon, oxygen, and nitrogen.
forming a second conductive layer over the sacrificial; and
10 removing the sacrificial layer.
2. The method of claim 1, wherein the forming the sacrificial
layer comprises forming a polyimide layer.
- 15 3. The method of claim 1, wherein the forming the dielectric
layer further comprises forming a silicon oxynitride.
4. The method of claim 3, wherein forming the silicon oxynitride
comprises performing plasma enhanced chemical vapor deposition
20 (PECVD).

5. The method of claim 4, wherein performing PECVD further comprises:

flowing N_2O ;

flowing N_2 ;

5 flowing NH_3 ; and

flowing SiH_4 .

6. The method of claim 5, wherein performing PECVD occurs at a temperature between approximately 200 and 300 degrees Celsius.

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7. The method of claim 6, wherein the temperature is approximately 240 degrees Celsius.

8. The method of claim 1, wherein the dielectric layer further
15 comprises hydrogen.

9. A method of making a microelectronic device comprising the steps of:

providing a substrate;

20 forming an input signal line over the substrate;

forming an output signal line over the substrate and spaced apart from the input signal line;

forming a sacrificial layer over the input signal line and the output signal line;

forming a dielectric layer over the sacrificial layer, wherein the dielectric layer comprises silicon, oxygen and nitrogen;
removing the sacrificial layer; and
forming a conductive layer over the dielectric layer

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10. The method of claim 9, wherein forming the dielectric layer further comprises forming silicon oxynitride.

11. The method of claim 10, wherein forming the silicon
10 oxynitride comprises performing plasma enhanced chemical vapor deposition (PECVD).

12. The method of claim 11, wherein performing PECVD occurs at a temperature between approximately 200 and 300 degrees Celsius.

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13. The method of claim 12, wherein the temperature is approximately 240 degrees Celsius.

14. A microelectronic device comprising:
20 a substrate;
a first conductive layer over the substrate;
a dielectric layer over the first conductive layer, wherein the dielectric layer comprises silicon, oxygen, and nitrogen;

a gap between the first conductive layer and the dielectric layer;
and
a second conductive layer over the dielectric layer.

5 15. The microelectronic device of claim 14, wherein the
dielectric layer further comprises silicon oxynitride.

16. The microelectronic device of claim 14, wherein the
dielectric layer is part of a cantilever structure.

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17. A method of making a device comprising the steps of:
providing a substrate;
forming a first conductive layer over the substrate;
forming a sacrificial layer over the first conductive layer;
15 forming a dielectric layer over the sacrificial layer, wherein the
dielectric layer comprises a silicon oxynitride;
forming a second conductive layer over the sacrificial layer; and
removing the sacrificial layer.

20 18. The method of claim 17, wherein forming the silicon
oxynitride comprises performing plasma enhanced chemical vapor
deposition (PECVD).

19. The method of claim 18, wherein performing PECVD occurs at a temperature between approximately 200 and 300 degrees Celsius.

20. The method of claim 19, wherein the temperature is
5 approximately 240 degrees Celsius.